Networking Basic

Q1. What is a node? (**Cisco**)

Answer: A node may be a point of connection within a network for systematic data transmission. A computer or printer, or other devices capable of sending and receiving data through a network is often called a node. Let's consider that there are two computers, two printers, and a server connected during a network; then we will say there are five nodes.

Q2. What exactly does one mean by a backbone network? (Juniper)

Answer: It is a network liable for assigning the info and, therefore, the route to different networks. Monitoring the channels, protocols, and bandwidth management is additionally the responsibility of a backbone network. It's due to this reason it's been named as a backbone network.

Q3. In data encapsulation, how each chunk knows about its destination? (Cisco)

Answer: Data encapsulation is an approach during which the info is split into smaller packets called chunks. All chunks have their source and destination address on them, which is how they reach their destination. It's necessary for network security that the chunk must contain its source address too.

Q4. What is the importance of the Physical Layer within the OSI model? (**Arista**)

Answer: Physical layer resembles the particular transfer of data from source to destination in bitstream – electrical impulse, light, or radio wave. In simple words, it accepts a frame from the info link layer and converts it into bits. It also receives bits from the physical medium and converts them into the structure.

Q5. What are the standards to see the network reliability? (Dell)

Answer: Network reliability means the power of the network to hold out the specified operation, like communication through a network. Network reliability plays a significant role in network functionality. The network monitoring systems and devices are the essential requirements for creating network reliability. The network monitoring system identifies the issues within the network while the network devices make sure that data should reach the excellent destination.

The following factors can measure the reliability of a network:

- **Downtime:** The downtime is defined because of the required time to recover.
- **Failure Frequency:** it's the frequency when it fails to figure the way it's intended.
- **Catastrophe:** It indicates that the network has been attacked by some unexpected event like fire or earthquake.